

#### ABSTRACT

A regeneration device for the diesel particulate filter (11) which traps particulates in exhaust gas discharged from a vehicle diesel engine (20) has a condition detecting sensor (12) which detects a condition of the diesel particulate filter, a vehicle speed sensor (27) which detects a vehicle speed, and a controller (40) which stores a map defining a predetermined running region of a diesel engine (20) in which regeneration of the filter (11) is possible. The controller (40) is programmed to modify the diesel engine running point to a running point which maintains the vehicle speed and lies within the predetermined running region. The controller (40) is further programmed to control the diesel engine to realize the engine rotation speed at the modified running point (D); set a target speed ratio of an automatic transmission (30) based on the maintained vehicle speed and the engine rotation speed (NeD) at the modified running point; and control the speed ratio of the automatic transmission to the target speed ratio.